Don H.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 7
25 FUNSTON ROAD
KANSAS CITY, KANSAS 66115

Site: Maline Creek
ID # MOD980631162
Break: 1.6
Other:
11-27-92

November 27, 1992

MEMORANDUM

SUBJECT: Removal Assessment, Maline Creek Asbestos Site, St. Louis, Missouri

FROM: Don Hamera
FIRE/EP&R/ENSV

TO: Ron McCutcheon
Acting Chief, EP&R/ENSV

OTEF 30290421 1.0
Superfund

I. BACKGROUND 0100

A. Site Description

The Certainteed/GAF, Maline Creek asbestos site is located off 600 St. Cyr Road in the corporate limits of Riverview and Bellfontaine Neighbors in metropolitan St. Louis, Missouri. The Former Certainteed property is now owned by P.G. Investments. Branch Metal Processing which is owned by P.G. Investments and Gateway Container Port, Inc., presently occupy the site. Clark properties of Hazelwood, Missouri, now owns the former GAF site. This property is now occupied by the New Era Group, Riverview Industrial Services, and MacMillan-Blodell Building Materials. Certainteed and GAF Corporations previously manufactured asbestos containing materials (ACM) at this site. The common area between the two facilities was used as a landfill. Maline Creek runs adjacent to these properties and the landfill itself. Approximately 150-200 people live in a residential area to the west across Maline Creek. A nursing home is located approximately 350 feet northwest of the site.

The landfill is located between the former Certainteed and GAF manufacturing plants. The landfill is approximately seven acres in size and contains several different types of ACM including transite pipe, sheeting material and settled solids from process wastewater solids. The Environmental Protection Agency (EPA) issued an Administrative Order to the GAF corporation on February 26, 1979, to cover the landfill. Pursuant to this order, both companies hired a consulting firm to draft closure plans to comply with the Missouri Solid Waste Management Law. Even though the Order was issued to the GAF Corporation, Certainteed shared the expense for covering the waste piles and stabilizing the Maline Creek bank. Letters from EPA (April 28, 1980) and the Missouri Department of Conservation (June 1, 1980) to the GAF Corporation verified approval of the closure actions taken at that time. A site inspection performed

by Missouri Department of Conservation (St. Louis Office) confirmed the project had been completed in basic conformance with the plans prepared by consultants, Reitz & Jens, Inc.

In January 1982 the Metropolitan Sewer District (MSD) conducted a cleanup in lieu of future stream channelization improvements along a 2.5 mile stretch of Maline Creek, a portion of which passed through the Certainteed and GAF Properties. MSD awarded the project to Bennish & Bommarito Construction Company. Information gleaned from the file indicates the aforementioned construction company spent two weeks removing transite pipe and other materials from the northwest corner of the Certainteed site, just off St. Cyr Road. Because of the large amount of transite pipe involved, it was decided to use a crane and wrecking ball to crush the remaining pipe into the creek bank to smooth out the channel. This area was allowed to remain undisturbed in the original closure action (1980) taken by Certainteed and GAF. Since this material was interspersed among trees and heavy brush, it was decided to let this portion of the creek bank remain undisturbed as the trees and brush would keep the ACM from migrating. The channel fluctuations from Maline Creek and the removal of the dense vegetation from the creek bank has caused the bank to erode, thus exposing this landfilled material.

B. Waste Management

There is an estimated 1000 square feet of exposed asbestos scrap pipe, sheeting material, and insulation materials located along the upper portion of Maline Creek (northwest corner of former Certainteed property). This material is scattered about the creek (a large portion of the entire creek adjacent to the Certainteed and GAF properties). Further downstream near the actual landfill itself (approximately seven acres) the bank of Maline Creek is eroding which could cause more asbestos material to become exposed.

For many years, Certainteed and GAF landfilled ACM in the common area behind the two plants. This area remained an open, uncovered area until 1979 when EPA issued an administrative order to GAF to cover this landfill. Both Certainteed and GAF ceased manufacturing operations in 1979.

Several previous investigations have taken place at this site. In 1988 at the request of the Air and Toxics Division, the Air Monitoring Section of the Air Monitoring and Compliance Branch inspected the area. This inspection revealed asbestos containing wastes (transite pipe and siding) in and around the creek. While no visible emissions were observed, the potential for asbestos fiber release will increase as the transite pipe and other asbestos containing materials deteriorate. Samples were taken at this time which confirmed the presence of asbestos.

EPA tasked the Technical Assistance Team (TAT) to perform a site assessment of the Certainteed/GAF site. On March 17, 1992, TAT members documented site conditions, collected samples and videotaped the area in and around the creek. The conclusion from this visit (see TAT report dated May 8, 1992) indicate ACM are exposed which could potentially lead to a release, especially with the quantity of material present. This report also indicates some of the scrap materials are in a friable state, while others may become friable as the weather and erosion process take their toll. These particles may become airborne and present a hazard to nearby populations. The samples taken by TAT also confirm the presence of asbestos laden material. The investigator noted the problem has intensified since the 1988 investigation. Another investigation by TAT completed in September 1992 showed large amounts of transite pipe located in the northwest corner of the Certainteed property (as stated earlier, this area was allowed to remain undisturbed in the original closure action). Investigations by EPA in July 1992 have documented large amounts of ACM which could potentially lead to a release. This area was also the subject of a recent citizen complaint which was referred to EPA through an inquiry from U.S. Representative William Clay's office.

II. THREAT

A. Evidence of Release

As stated earlier, several forms of ACM are present in and around the Maline Creek adjacent to the Certainteed and GAF properties. The types of materials present include transite pipe (some of which is in a weathered crumbling condition), sheeting material, insulation, and a slag/slurry type substance which also readily crumbles and releases asbestos fibers. Much of the exposed material lies in a four to six foot layer next to the creek in the extreme northwest corner of the Certainteed property. Tests results confirm Chrysotile and Crocidolite types of asbestos present in concentrations ranging from 15 to 85 percent. Some of the material has and will continue to cave off into Maline Creek and migrate to the Mississippi River. Numerous piles of friable asbestos material are located on the former Certainteed property. These piles are in the open where friable materials could easily migrate. There are abandoned manufacturing buildings located on-site which contain friable asbestos material. Some of these buildings have broken windows. This friable insulation could migrate and potentially affect nearby populations.

Directly to the west (120 to 150 feet) off the Certainteed/GAF site is a residential subdivision where approximately 150 to 200 people reside. A nursing home lies 350 feet northwest of the site. Particles from the more friable material may become airborne and present a potential inhalation

hazard to humans residing near this site. This ACM is also caving off and falling into Maline Creek, thus releasing fibers into the water.

B. Threats to Public Health or Welfare

The potential release of airborne, friable asbestos threatens nearby residents and industrial employees. As the ACM continues to weather and break down, asbestos fibers may become airborne and pose an inhalation threat to nearby populations. The ACM are located 120 to 150 feet from nearby subdivision residents. From the Oil and Hazardous Material/Technical Assistance Data System (OHM/TADS), the chronic health risk from long term continued inhalation of asbestos dust results in asbestosis, a form of pneumoconiosis. The primary effect of inhalation is an interstitial pulmonary fibrosis. Asbestosis can increase the risk of lung cancer.

C. Threats to the Environment

The creek area is not secured and animals from the residential subdivision are able to access the area. Large amounts of ACM are now located in the Maline Creek and the potential for more material to cave off into the creek is present. The Maline Creek joins the Mississippi River approximately one-half mile downstream.

III. EVALUATION OF THE POTENTIAL FOR A REMOVAL ACTION

This site presents a potential inhalation hazard to humans living in the residential area near the site, especially with the large amount of material present. If no action is taken, large amounts of ACM will continue to slough off into the Maline Creek. The close proximity of the residential area in relationship to the creek is also very important. Maline Creek runs directly adjacent to the housing subdivision and in some cases, is located only 120 feet from the yards of houses in the subdivision.

IV. RECOMMENDATION

A removal action may be warranted in this particular case, especially with the quantity of ACM present (friable material) and the proximity of humans inhabiting the area around the Certainteed and GAF facilities. The ACM will continue to weather and friable asbestos may become airborne posing an inhalation risk to nearby inhabitants. The material is caving off into Maline Creek, thus contaminating the creek which eventually flows into the Mississippi River. More information will have to be obtained through engineering studies and further assessment to properly calculate cost data and removal strategies.

cc: Greg Reesor, SPFD